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- (71) Applicant (*for all designated States except US*): BOREALIS TECHNOLOGY OY [FI/FI]; P.O. Box 330, FIN-06101 Porvoo (FI). ✓
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- (75) Inventors/Applicants (*for US only*): GAROFF, Thomas [FI/FI]; Borgströminkuja 4 K 104, FIN-00840 Helsinki (FI). WALDVOGEL, Päivi [FI/FI]; Päiviväläispolku 12 C, FIN-06450 Porvoo (FI). PESONEN, Kari [FI/FI]; Kiertotie 11, FIN-07230 Monninkylä (FI). ✓
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- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: METHOD FOR THE PREPARATION OF OLEFIN POLYMERISATION CATALYST SUPPORT AND AN OLEFIN POLYMERISATION CATALYST ✓

(57) Abstract: The invention is directed to a process for producing a particulate support for an olefin polymerisation catalyst wherein a solution of a magnesium compound is contacted with a solution of an element of Group 13 or 14 of the Periodic Table (IUPAC) to obtain a solid reaction product. In the process of the invention the solid reaction product is formed by i) contacting (a) a solution of a magnesium hydrocarboxy compound with (b) a solution of a halogen-containing compound of an element of Group 13 or 14 of the Periodic Table (IUPAC); and ii) recovering the solidified reaction product from the reaction mixture.

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INTERNATIONAL SEARCH REPORT

International Application No.

PCT/ 02/14463

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C08F110/02 C08F4/655

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C08F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 496 660 A (GIBBS RONALD L ET AL) 29 January 1985 (1985-01-29) cited in the application claims 13,21; example 22	1-9, 12-14, 17-22, 24-26,28
X	WO 99 55741 A (FINA RESEARCH ;VEREECKE DOMINIQUE (BE)) 4 November 1999 (1999-11-04) cited in the application see CAT A, B, C1, C4 page 6-9; claims 1,13; example 1; table 1	1-4, 6-10,12, 15-21, 23-28
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	-/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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INTERNATIONAL SEARCH REPORT

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 652 541 A (IMAI MASAFUMI ET AL) 24 March 1987 (1987-03-24) column 7 -column 11; example 1; table 1	1-8, 12-14, 17-20, 22, 24-26,28
A	EP 0 591 922 A (MITSUI PETROCHEMICAL IND) 13 April 1994 (1994-04-13) cited in the application see also cat A, B, C1, C4 example 1	1-28
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A	EP 0 108 489 A (HERCULES INC) 16 May 1984 (1984-05-16) page 10 -page 12	1-28
A	ZHANG HANZHUO: "Catalysts for production of linear polyethylene by gas-phase fluidized bed process" CAPLUS, XP002242631 abstract	1-28
A	EP 0 258 089 A (MONTEDISON SPA) 2 March 1988 (1988-03-02) claim 2; example 1	1-28

INTERNATIONAL SEARCH REPORT

International application No.
CT/EP 02/14463

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: claims 1-28 (in part)

The subject matter of claims 1-28 insofar as it relates to halogen-containing compounds of group 13 of the Periodic Table.

2. Claims: claims 1-28 (in part)

The subject matter of claims 1-28 insofar as it relates to halogen-containing compounds of group 14 of the Periodic Table.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/02/14463

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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